CONFERENCE PAPER

Title : Building human-centric organisations with Industry 4.0 technologies in the Industry 5.0 era: A micro and meso level perspective

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Abstract :

Manufacturing organisations are adopting Industry 4.0 (I40) technologies. Such technologies enable extensive automation and digitalisation of production and interaction with workers. Although the literature demonstrates how to use I40 technologies to develop autonomous production, little is known about the organisational aspects at the individual (micro) and organisational (meso) levels to build a human-centric organisation. This goal is also echoed by the Industry 5.0 policy proposed by the European Commission. Therefore, we address this research limit by conducting a literature review summarising the organisational aspects at the individual (micro) and organisational (meso) levels to build a human-centric organisation with I40 technologies. The micro-level aspects include worker training, workers with digital and social skills, commitment to workers' needs, and hiring candidates with a digital mindset. Meso-level aspects are related to developing decentralised structures, promoting crossorganisational communication about I40 technologies' goals and implications, fostering a lean culture, and conducting pre-I40 adoption organisational analysis.

Keywords:

Industry 4.0, industry 5.0, operator 4.0, literature review, organisational aspects, human-centric organisation, lean

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